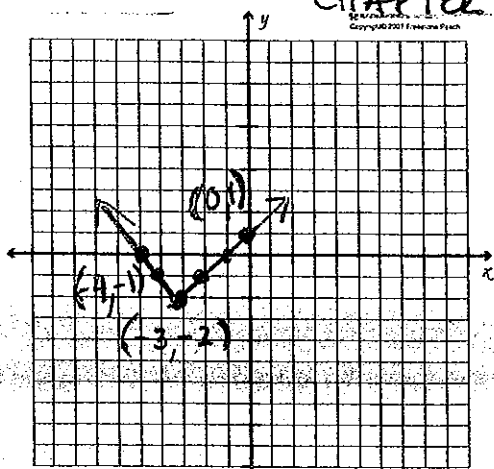
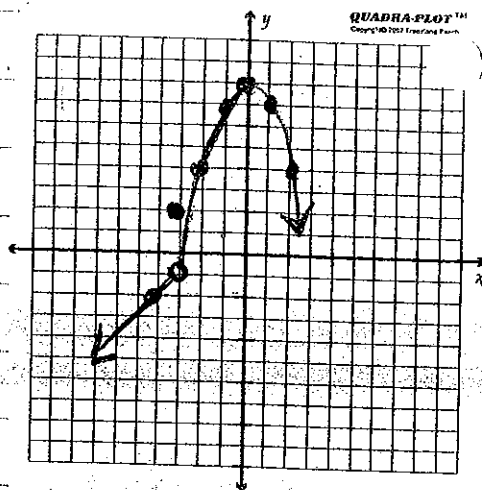


CHAPTER 1 Extra Review

1)



2)



$$D: (-\infty, \infty)$$

$$R: [-2, \infty)$$

3) Domain of  $(g/f)(x)$  is  $(-\infty, -5) \cup (-5, 2) \cup (2, \infty)$

$$\begin{aligned} 4) \quad f(-x) &= \frac{3(-x)^3 - (-x)}{4(-x)^4 + (-x)^2} \\ &= \frac{-3x^3 + x}{4x^4 + x^2} \end{aligned}$$

$f(x)$  is an odd function because  $f(-x) = -f(x)$

5) Domain of  $h(x)$  is  $\{x \mid x \leq -4 \text{ or } x \geq 4\}$

$$6) \quad x = \frac{5}{-3y-2}$$

$$x(-3y-2) = 5$$

$$-3xy - 2x = 5$$

$$-3xy = 2x + 5$$

$$y = \frac{2x+5}{-3x}$$

$$f^{-1}(x) = \frac{2x+5}{-3x}$$

$$\text{or } -\frac{(2x+5)}{3x}$$